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U.S. DEPARTMENT OF AGRICULTURE

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STATUS OF THE EUROPEAN CORN BORER IN 1943

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Distribution

The known distribution of the European corn borer was extended

1/ The data presented in this report were accumulated by the Bureau of Entomology and Plant Quarantine and various interested State agencies, and were assembled and tabulated at Lafayette, Ind., substation of the laboratory for European corn borer research, Toledo, Ohio, with W. G. Bradley in charge. In addition to 119 $\frac{1}{2}$ counties surveyed by the Bureau, the survey in 1943 was conducted in 78 counties of Indiana, by the Indiana State Conservation Department; in 14 counties of Maine, in 20 counties of New Jersey, in 28 counties of Pennsylvania, and in 8 counties of Vermont, by the State departments of agriculture of those States; in 15 counties of New York, including Long Island, by the New York Agricultural Experiment Station at Geneva and the New York State Department of Agriculture, cooperating; and in 7 counties of New Hampshire, in 32 counties of Illinois, in 11 counties of Iowa, in 4 counties of Missouri, and in half the 3 counties of Delaware, by the agricultural experiment stations of those States.

New county records of the European corn borer in 1943 were contributed by the State departments of agriculture of Minnesota, Missouri, North Carolina, Virginia, and Wisconsin; by the Kentucky Agricultural Experiment Station (which also provided similar information for 1942); by the State Conservation Department of Indiana; and by the Bureau of Entomology and Plant Quarantine of the U. S. Department of Agriculture. The Bureau appreciates the interest and cooperation of all States in which the survey was conducted and from which new records of distribution were obtained in 1943.

considerably westward and southward in 1943 in continuation of the noticeable spread of the insect in the previous 2 years. The following list gives the counties from which the European corn borer was reported in 1943 for the first time, and map 1 shows the known distribution of the insect to date, including the 1943 spread.

Indiana (2 counties): Vanderburgh and Warrick.

Iowa (38 counties): Allamakee, Appanoose, Benton, Black Hawk, Bremer, Buchanan, Butler, Cerro Gordo, Chickasaw, Clarke, Davis, Delaware, Fayette, Floyd, Franklin, Grundy, Hamilton, Hancock, Hardin, Howard, Iowa, Jasper, Lucas, Mahaska, Marion, Marshall, Mitchell, Monroe, Polk, Poweshiek, Story, Tama, Warren, Wayne, Winnebago, Winneshiek, Worth, and Wright.

Kentucky (35 counties): Allen, Anderson, Barren, Boyd, Breckinridge, Bullitt, Carter, Clark, Daviess, Estill, Fayette, Fleming, Franklin, Garrard, Grayson, Greenup, Hancock, Hardin, Harrison, Hart, Henderson, Larue, Madison, Marion, Meade, Nelson, Ohio, Scott, Shelby, Simpson, Spencer, Union, Warren, Washington, and Woodford.

Minnesota (1 county): Houston.

Missouri (13 counties): Adair, Cape Girardeau, Jefferson, Knox, Macon, Monroe, Perry, Putnam, Randolph, Ste. Genevieve, Schuyler, Scotland, and Shelby.

North Carolina (4 counties): Beaufort, Hyde, Perquimans, and Washington.

Virginia (8 counties): Clarke, Culpeper, Frederick, Hanover, King William, Rappahannock, Shenandoah, and Warren.

Wisconsin (21 counties): Adams, Barron, Buffalo, Chippewa, Clark, Crawford, Eau Claire, Jackson, Juneau, La Crosse, Lincoln, Monroe, Pepin, Pierce, Polk, Richland, Rusk, Taylor, Trempealeau, Vernon, and Wood.

Fall Abundance

Again, in the fall of 1943, the abundance of the European corn borer in corn was determined for a considerable part of the infested area. In all, 3,568 cornfields were examined in 337 counties in 20 infested States. Except in Delaware and Maine, the survey procedure in 1943 followed that in general use by the Bureau during recent years. By this method 10 cornfields at random were sampled within each county, the count of infestation being obtained by examining 25 consecutive corn plants taken at a given distance within a field from near the mid point

of its most accessible edge, and the number of borers per infested plant being determined by dissecting the first 2 plants found infested. The procedure in Delaware differed only to the extent of doubling the number of fields examined per county. In Maine 25 to 30 fields were surveyed in each county, the population figure for each field being based on an examination of 100 plants and the dissection of 5 infested plants. In either survey procedure the product of the percentage of plant infestation in a field and the average number of borers per infested plant provided a figure designated as the average number of borers per 100 plants. The population data derived in this way for the individual fields were then grouped in the calculation of county averages.

A summary of the data on borer abundance in corn for all counties and States surveyed in 1943 is presented in table 1, in which the results of the 1942 survey are also given for comparison. In table 2 the average numbers of borers per 100 plants are given for each county surveyed in 1943 and all possible comparisons are made with similar data for 1942. It should be noted that a zero recorded in table 2 for any county indicates a population so low that no infested plants occurred within the specified counts and does not necessarily mean the complete absence of the borer. The relative abundance of the borer in corn in that part of the infested area surveyed in 1943 is shown on map 2.

The general level of European corn borer abundance in 1943 was the highest on record in the United States, and the insect was present over a much greater area than in any previous year. The average number of borers per 100 plants for 267 comparable counties in the survey was 176.3 in 1943 as compared with 96.1 in 1942. Significant increases in corn borer abundance from 1942 to 1943 occurred in 18 of the 20 infested States in which the current fall survey was conducted. The two exceptions to the increase were New Hampshire and Vermont, where relatively light populations remained about the same in 1943 as in 1942.

The more notable infestations of the borer in the fall of 1943 were found in southern New England, on Long Island and in the Hudson River Valley of New York; in central New Jersey, southeastern Pennsylvania, and Delaware, on the Eastern Shore of Maryland and Virginia, in the northeastern corner of North Carolina, in southwestern Ohio, in the northern two-thirds of Indiana, and in northwestern Illinois. Maximum concentrations of the insect (i.e., populations of more than 601 borers per 100 plants) occurred on Long Island, N. Y., in Bucks, Delaware, Montgomery, and Chester Counties, Pa., in New Haven and Hartford Counties, Conn., in Mercer County, N. J., in Worcester County, Md., in Northampton County, Va., and in Newton County, Ind.

The first generation of the corn borer was not specially injurious to field corn in the Corn Belt States in 1943. In general, corn was planted late owing to exceptionally wet weather, and as a result there probably occurred (1) a diversion of many ovipositing moths from the short corn available to other host plants which were more attractive to them at the time of oviposition and (2) a lowered survival of the larvae hatching from the eggs which were deposited on the young corn. The second generation of the insect, however, apparently encountered

favorable conditions and developed in greater numbers in corn during the fall of 1943 than in the previous fall, causing some plant breakage.

Summer Abundance in Sweet Corn and Other Plants ^{2/}

Reports from various parts of the infested area indicated a generally heavy infestation of the European corn borer in early market sweet corn in 1943, both in commercial plantings and in Victory gardens. A small number of fields of sweet corn were surveyed in each of several localities, and the data on borer abundance obtained are summarized in table 3. As a rule, the fields surveyed represented the most heavily infested ones within a given locality. In a number of localities the acreage planted to early sweet corn was much reduced in 1943 as a result of serious borer damage in 1942.

In the vicinity of New Haven, Conn., an average of 9.5 borers per plant was found in early sweet corn in 1943 as compared with 7.9 in 1942, the infestation in the 6 highest fields ranging from 10.1 to 22.1 larvae per plant. Borer abundance in sweet corn in the Beverly district in New Jersey increased from an average of 4 borers per plant in 1942 to 9.9 in 1943. Eight, or 40 percent, of the fields surveyed in this locality in 1943 averaged from 12.3 to 17.7 larvae per plant. Little early sweet corn was grown in the area immediately west of Toledo, Ohio, in 1943, and the 6 fields surveyed in that locality were ruined by the borer. The number of borers per plant in these fields in 1943 averaged 36.3 as compared with 8.5 for the same general locality in 1942, and the per-plant populations of the borer in the individual fields were as follows: 55.7, 35.8, 32.6, 31, and 29.9. Similar destruction of early sweet corn occurred in the small acreage grown in Kankakee County, Ill., in 1943. Four fields near St. Anne in that county averaged 38.3 larvae per plant, the per-plant populations of the borer in the individual fields being as follows: 53.8, 44, 32.4, and 23. Severe economic damage to sweet corn by the corn borer was also reported from Pennsylvania, New York, and Massachusetts. Sweet corn grown east of St. Louis, in Madison County, Ill., was very lightly infested in 1943.

The European corn borer was abundant in many fields of oats in Ohio, Indiana, and Illinois, in 1943, and caused considerable breakage of the plant stems. The borer also caused economic damage to some commercial plantings of gladiolus in Illinois and Indiana, and the insect was common in white potato plants in New Jersey, Pennsylvania, New York, Virginia, and Connecticut, and occasionally present in this crop in Ohio, Indiana, and Illinois.

^{2/} Information on the borer in sweet corn and in other plants was kindly supplied by the entomologists of the agricultural experiment stations of Maine, New Jersey, New York (Geneva and Ithaca), Massachusetts, Ohio, Indiana (Purdue), and Illinois, and of the State departments of agriculture of Pennsylvania, Virginia, and Rhode Island.

In addition, the borer was recorded as infesting the following plants in 1943: Tomatoes (fruit and plant), peppers, rhubarb, cabbage, beans, peas, beets, soybeans, lima beans, swiss chard, hemp, onion plants, zinnia, marigold, and other flowering plants in gardens, and various weeds, including smartweed, ragweed, and wild mustard. In some instances the infestation was undoubtedly due to migration of the borers from nearby sweet corn or oats.

Table 1.--Summary by States of European corn borer abundance in corn, fall of 1943, and comparisons with data for 1942

State	1943		Comparable counties, 1943 with 1942	Average borers per 100 plants	
	Counties	Average borers per 100 plants		1942	1943
	Number	Number	Number	Number	Number
Connecticut.....	6	563.8	6	79.0	563.8
Delaware.....	3	244.7	3	106.1	244.7
Illinois.....	41	65.1	24	64.5	90.5
Indiana.....	78	170.8	78	156.4	170.8
Iowa.....	20	19.9	0	-	-
Maine.....	14	12.0	13	3.6	11.8
Maryland.....	8	210.7	8	53.0	210.7
Massachusetts.....	6	320.8	6	21.7	320.8
Michigan.....	14	66.0	14	38.2	66.0
Missouri.....	8	2.2	0	-	-
New Hampshire.....	9	11.4	9	12.2	11.4
New Jersey.....	19	246.7	19	125.3	246.7
New York.....	21	210.5	19	127.6	232.1
North Carolina.....	3	259.0	3	61.2	259.0
Ohio.....	33	119.7	21	74.9	110.8
Pennsylvania.....	28	251.7	18	96.2	367.6
Rhode Island.....	2	398.3	2	79.3	398.3
Vermont.....	10	24.9	10	21.9	24.9
Virginia.....	5	449.8	5	189.2	449.8
Wisconsin.....	9	61.6	9	27.5	61.6
Total.....	337	-	267	-	-
Areal average.....	-	148.6	-	96.1	176.3

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Table 2.--European corn borer abundance in corn, fall of 1943, and comparisons with data for 1942

State and county	Average borers per 100 plants		:	State and county	Average borers per 100 plants	
	1942	1943			1942	1943
	Number	Number			Number	Number
<u>Connecticut:</u>			:	<u>Illinois (Cont'd)</u>		
Hartford.....	106.4	970.8	:	Mercer.....	-	61.2
Middlesex.....	105.6	484.4	:	Ogle.....	16.4	215.8
New Haven.....	145.4	979.2	:	Peoria.....	16.4	90.0
New London.....	81.2	502.8	:	Rock Island.....	5.8	93.6
Tolland.....	22.6	207.8	:	Sangamon.....	7.0	13.6
Windham.....	12.8	237.6	:	Scott.....	-	13.8
Average:			:	St. Clair.....	-	1.6
6 counties	79.0	563.8	:	Stephenson.....	-	136.6
			:	Vermilion.....	162.2	97.6
<u>Delaware:</u>			:	Whiteside.....	10.4	216.4
Kent.....	43.9	248.0	:	Will.....	-	89.2
New Castle.....	117.2	360.3	:	Woodford.....	50.0	151.8
Sussex.....	157.3	125.9	:	Average:		
Average:			:	24 counties	64.5	90.5
3 counties	106.1	244.7	:	41 counties	-	65.1
			:			
<u>Illinois:</u>			:	<u>Indiana:</u>		
Adams.....	-	0.8	:	Adams.....	171.2	116.4
Boone.....	3.2	104.8	:	Allen.....	174.6	128.2
Bond.....	-	0	:	Bartholomew.....	114.4	31.0
Bureau.....	7.2	169.4	:	Benton.....	302.5	371.8
Champaign.....	143.0	31.6	:	Blackford.....	501.7	302.4
Christian.....	5.4	15.6	:	Boone.....	135.0	130.4
Clark.....	-	62.2	:	Brown.....	42.6	27.6
Crawford.....	18.2	16.2	:	Carroll.....	295.4	229.8
DeKalb.....	41.0	67.8	:	Cass.....	375.2	197.0
DuPage.....	-	64.8	:	Clay.....	93.4	19.8
Edgar.....	40.6	30.4	:	Clinton.....	248.8	143.6
Fayette.....	-	0.8	:	Daviess.....	2.1	25.4
Grundy.....	193.6	58.0	:	Dearborn.....	46.2	47.2
Hancock.....	-	2.4	:	Decatur.....	70.0	48.2
Henderson.....	-	28.0	:	Dekalb.....	94.3	184.2
Henry.....	6.4	74.6	:	Delaware.....	412.1	151.6
Iroquois.....	293.8	215.8	:	Elkhart.....	68.7	312.6
Jefferson.....	-	0	:	Fayette.....	280.6	175.4
Jersey.....	-	4.2	:	Fountain.....	268.3	144.0
Kankakee.....	240.8	88.6	:	Franklin.....	90.0	52.4
Lake.....	11.8	25.4	:	Fulton.....	281.2	541.4
La Salle.....	36.4	132.2	:	Gibson.....	1.5	8.2
Lawrence.....	-	12.4	:	Grant.....	488.9	216.2
Livingston.....	123.0	79.0	:	Greene.....	16.3	49.6
Logan.....	26.0	59.0	:	Hamilton.....	196.2	125.8
Macon.....	24.2	35.8	:	Hancock.....	223.3	144.8
Madison.....	-	1.6	:	Hendricks.....	87.7	79.4
McDonough.....	-	20.4	:	Henry.....	339.5	191.4
McLean.....	64.6	87.8	:			

Table 2.--European corn borer abundance in corn, fall of 1943, and comparisons with data for 1942--Continued

State and county			State and county		
Average borers per 100 plants			Average borers per 100 plants		
1942			1942		
Number			Number		
1943			1943		
Number			Number		
Indiana (Cont'd)			Indiana (Cont'd)		
Howard.....	303.2	311.6	Warrick.....	0	11.4
Huntington.....	156.8	267.4	Warren.....	201.7	309.0
Jasper.....	224.6	526.0	Wayne.....	401.6	176.2
Jay.....	252.4	215.0	Wells.....	302.3	320.6
Jefferson.....	5.9	28.4	White.....	198.9	438.0
Johnson.....	234.2	215.6	Whitley.....	47.8	253.6
Knox.....	5.3	17.2	Average:		
Kosciusko.....	184.5	332.0	78 counties	156.4	170.8
Lagrange.....	13.4	173.8			
Lake.....	34.0	293.8	Iowa:		
La Porte.....	71.4	155.2	Cedar.....	-	12.4
Madison.....	243.3	179.4	Clayton.....	-	1.2
Marion.....	220.7	183.6	Clinton.....	-	114.0
Marshall.....	117.4	215.4	Delaware.....	-	3.6
Miami.....	292.1	337.8	Des Moines.....	-	11.6
Montgomery.....	114.2	102.4	Dubuque.....	-	9.0
Morgan.....	84.3	112.8	Henry.....	-	9.8
Newton.....	259.0	684.2	Jackson.....	-	53.8
Noble.....	32.5	255.8	Jefferson.....	-	2.4
Ohio.....	39.5	47.0	Johnson.....	-	9.2
Owen.....	10.7	16.6	Jones.....	-	13.6
Parke.....	97.9	124.0	Keokuk.....	-	3.2
Pike.....	0	8.4	Lee.....	-	5.2
Porter.....	32.6	273.6	Linn.....	-	7.2
Posey.....	1.0	2.8	Louisa.....	-	5.2
Pulaski.....	120.1	216.8	Muscataine.....	-	23.6
Putnam.....	98.2	62.8	Scott.....	-	98.2
Randolph.....	364.8	153.2	Van Buren.....	-	0.4
Ripley.....	20.9	15.8	Wapello.....	-	3.6
Rush.....	205.2	129.4	Washington.....	-	10.6
St. Joseph.....	103.2	271.6	Average:		
Shelby.....	203.5	127.2	20 counties	-	19.9
Spencer.....	0.3	4.0			
Starke.....	139.1	273.2	Maine:		
Steuben.....	55.7	202.6	Androscoggin....	2.7	15.7
Sullivan.....	12.5	47.2	Cumberland.....	6.2	7.0
Switzerland.....	32.4	24.6	Franklin.....	2.0	4.5
Tippecanoe.....	340.4	212.8	Hancock.....	0.7	16.9
Tipton.....	283.4	382.6	Kennebec.....	2.1	5.7
Union.....	195.6	74.2	Knox.....	4.0	21.8
Vanderburgh.....	0	1.2	Lincoln.....	1.8	4.9
Vermillion.....	161.8	140.6	Oxford.....	1.0	4.6
Vigo.....	54.1	46.0	Penobscot.....	-	15.2
Wabash.....	203.9	152.6	Piscataquis.....	0.6	13.0

Table 2.--European corn borer abundance in corn, fall of 1943, and comparisons with data for 1942--Continued

State and county	Average borers per 100 plants		:	State and county	Average borers per 100 plants	
	1942	1943			1942	1943
	Number	Number			Number	Number
<u>Maine (Cont'd)</u>			:	<u>Michigan (Cont'd)</u>		
Sagadahoc.....	10.4	16.5	:	Van Buren.....	12.8	17.6
Somerset.....	2.0	25.7	:	Wayne.....	112.4	45.8
Waldo.....	1.5	8.7	:	Average:		
York.....	11.2	8.1	:	14 counties	38.2	66.0
Average:			:			
13 counties	3.6	11.8	:	Missouri:		
14 counties	-	12.0	:	Clark.....	-	2.8
			:	Lewis.....	-	8.8
<u>Maryland:</u>			:	Lincoln.....	-	0
Caroline.....	39.0	79.4	:	Marion.....	-	3.2
Dorchester.....	17.4	116.0	:	Pike.....	-	0
Kent.....	43.4	212.4	:	Ralls.....	-	1.2
Queen Anne's.....	36.8	75.6	:	St. Charles.....	-	0
Somerset.....	13.8	102.6	:	St. Louis.....	-	1.2
Talbot.....	47.6	185.6	:	Average:		
Wicomico.....	91.8	175.4	:	8 counties	-	2.2
Worcester.....	134.0	738.4	:			
Average:			:	<u>New Hampshire:</u>		
8 counties	53.0	210.7	:	Belknap.....	5.6	8.8
			:	Carroll.....	2.0	3.0
<u>Massachusetts:</u>			:	Cheshire.....	47.2	17.4
Essex.....	39.6	333.8	:	Grafton.....	5.8	18.2
Franklin.....	3.2	110.2	:	Hillsboro.....	3.6	7.2
Hampden.....	60.4	374.4	:	Merrimack.....	7.2	9.8
Hampshire.....	17.2	345.4	:	Rockingham.....	7.6	23.8
Middlesex.....	6.4	512.8	:	Strafford.....	2.0	8.0
Worcester.....	3.5	248.2	:	Sullivan.....	28.6	6.4
Average:			:	Average:		
6 counties	21.7	320.8	:	9 counties	12.2	11.4
			:			
<u>Michigan:</u>			:	<u>New Jersey:</u>		
Allegan.....	4.2	84.8	:	Atlantic.....	23.6	17.8
Berrien.....	18.4	90.8	:	Bergen.....	190.6	471.2
Gratiot.....	12.4	123.0	:	Burlington.....	273.4	395.8
Huron.....	66.8	30.8	:	Camden.....	182.7	212.5
Lenawee.....	42.8	154.0	:	Cape May.....	21.6	35.0
Macomb.....	21.8	79.2	:	Cumberland.....	99.0	187.1
Monroe.....	94.2	97.2	:	Essex-Union.....	75.8	359.0
Ottawa.....	3.2	49.2	:	Gloucester.....	95.8	124.8
Saginaw.....	25.6	18.0	:	Hunterdon.....	87.0	205.6
St. Clair.....	27.4	21.2	:	Mercer.....	166.4	762.4
Sanilac.....	19.2	12.8	:	Middlesex.....	437.0	459.4
Tuscola.....	74.2	99.8	:	Monmouth.....	273.8	391.6

Table 2.--European corn borer abundance in corn, fall of 1943, and comparisons with data for 1942--Continued

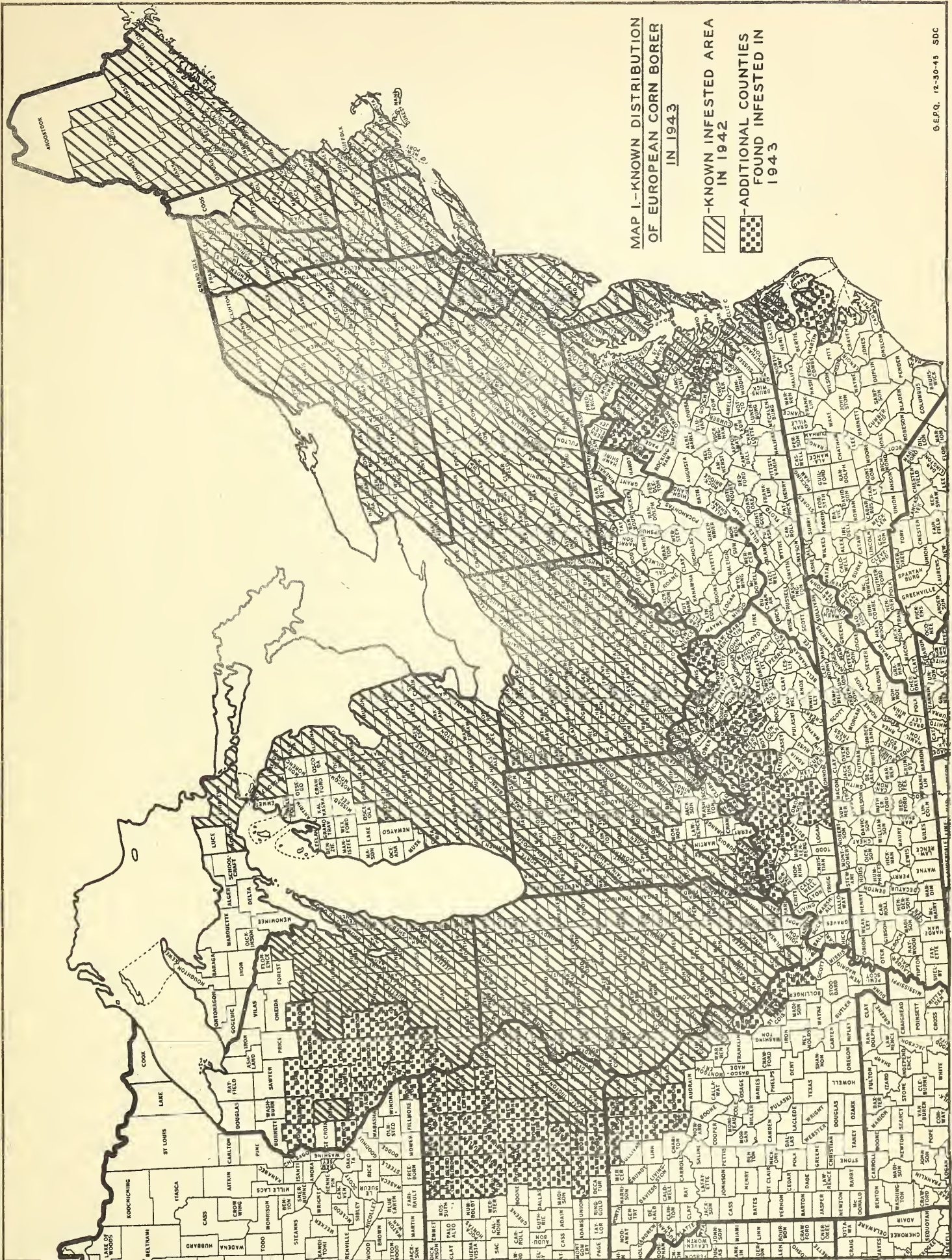
State and county			Average borers per 100 plants			State and county			Average borers per 100 plants		
			1942	1943					1942	1943	
			Number	Number					Number	Number	
<u>New Jersey (Cont'd)</u>						<u>Ohio (Cont'd)</u>					
Morris.....			40.8	270.0		Butler.....			-	136.6	
Ocean.....			68.7	136.3		Champaign.....			38.0	248.2	
Passaic.....			154.2	163.2		Clark.....			-	178.0	
Salem.....			29.4	121.4		Clinton.....			-	95.0	
Somerset.....			112.4	178.6		Darke.....			-	70.8	
Sussex.....			17.2	81.6		Defiance.....			50.6	50.8	
Warren.....			32.0	114.4		Fayette.....			22.2	104.2	
Average:						Franklin.....			-	196.0	
20 counties			125.3	246.7		Fulton.....			108.0	54.2	
						Greene.....			-	146.2	
<u>New York:</u>						Hamilton.....			-	77.4	
Albany.....			43.0	382.0		Hancock.....			110.4	95.8	
Broome.....			-	0		Hardin.....			29.0	119.6	
Columbia.....			54.8	195.2		Henry.....			126.2	144.2	
Dutchess.....			72.4	143.0		Logan.....			57.0	111.8	
Erie.....			30.4	51.0		Lucas.....			98.2	85.6	
Greene.....			15.0	120.2		Madison.....			-	270.4	
Livingston.....			5.2	3.6		Mercer.....			9.4	112.6	
Monroe.....			80.4	8.2		Miami.....			15.2	305.4	
Nassau.....			473.6	1782.0		Montgomery.....			-	112.8	
Niagara.....			518.2	104.2		Ottawa.....			24.6	37.2	
Oneida.....			11.8	2.6		Paulding.....			142.0	30.8	
Onondaga.....			52.8	43.4		Pickaway.....			-	144.4	
Ontario.....			-	11.4		Preble.....			-	85.2	
Orange.....			101.6	132.4		Putnam.....			183.6	90.2	
Orleans.....			30.6	41.0		Sandusky.....			56.4	159.2	
Rensselaer.....			12.2	70.0		Shelby.....			11.6	104.6	
Saratoga.....			14.8	179.6		Van Wert.....			207.2	125.2	
Schenectady.....			38.0	124.2		Warren.....			-	109.8	
Suffolk.....			576.6	753.6		Williams.....			52.0	32.6	
Ulster.....			172.4	256.2		Wood.....			126.2	104.8	
Wayne.....			120.8	16.6		Average:					
Average:						21 counties			74.9	110.8	
19 counties			127.6	232.1		33 counties			-	119.7	
21 counties			-	210.5							
						<u>Pennsylvania:</u>					
<u>North Carolina:</u>						Adams.....			-	66.2	
Camden.....			127.6	121.4		Armstrong.....			11.6	5.6	
Currituck.....			33.8	531.2		Berks.....			31.0	418.8	
Pasquotank.....			22.2	124.4		Bucks.....			433.2	1364.4	
Average:						Butler.....			-	8.0	
3 counties			61.2	259.0		Centre.....			8.2	26.2	
						Chester.....			68.6	936.2	
<u>Ohio:</u>						Crawford.....			4.2	56.6	
Allen.....			61.6	113.8		Cumberland.....			2.0	58.0	
Auglaize.....			42.6	96.8							

Table 2.--European corn borer abundance in corn, fall of 1943, and comparisons with data for 1942--Continued:



State and county	Average borers per 100 plants		State and county	Average borers per 100 plants	
	1942	1943		1942	1943
	Number	Number		Number	Number
<u>Pennsylvania (Cont'd):</u>			<u>Virginia:</u>		
Dauphin.....	-	100.4	Accomac.....	223.6	569.0
Delaware.....	261.4	1267.0	Nansemond.....	43.2	50.2
Erie.....	51.0	292.8	Norfolk.....	23.0	34.4
Franklin.....	-	11.6	Northampton....	236.4	1389.0
Indiana.....	2.4	8.4	Princess Anne...	420.0	206.4
Juniata.....	-	15.2	Average:		
Lancaster.....	44.2	438.4	5 counties	189.2	449.8
Lawrence.....	-	2.3			
Lebanon.....	3.2	100.0	<u>Wisconsin:</u>		
Lehigh.....	118.2	227.8	Calumet.....	25.6	60.6
Luzerne.....	-	131.6	Dodge.....	15.6	15.0
Lycoming.....	-	14.2	Fond du Lac.....	19.0	88.0
Mercer.....	-	48.3	Manitowoc.....	30.6	37.0
Montgomery.....	371.6	998.4	Outagamie.....	11.2	74.6
Northampton.....	173.0	262.8	Ozaukee.....	38.6	141.4
Perry.....	2.8	29.6	Sheboygan.....	71.8	92.2
Union.....	-	33.6	Washington.....	13.2	32.0
Westmoreland.....	0	0	Winnebago.....	21.8	13.8
York.....	145.0	125.5	Average:		
Average:			9 counties	27.5	61.6
18 counties	96.2	367.6			
28 counties	-	251.7			
<u>Rhode Island:</u>					
Bristol-Newport...	84.4	498.4			
Washington.....	74.2	298.2			
Average:					
2 counties	79.3	398.3			
<u>Vermont:</u>					
Addison.....	20.2	3.8			
Bennington.....	90.9	43.3			
Chittenden.....	5.8	19.4			
Franklin.....	12.6	11.6			
Grand Isle.....	14.2	12.0			
Orange.....	8.4	13.8			
Rutland.....	20.6	27.4			
Washington.....	9.4	17.4			
Windham.....	25.6	70.0			
Windsor.....	11.2	29.8			
Average:					
10 counties	21.9	24.9			

Table 3.--European corn borer abundance in early sweet corn, summers of 1942 and 1943

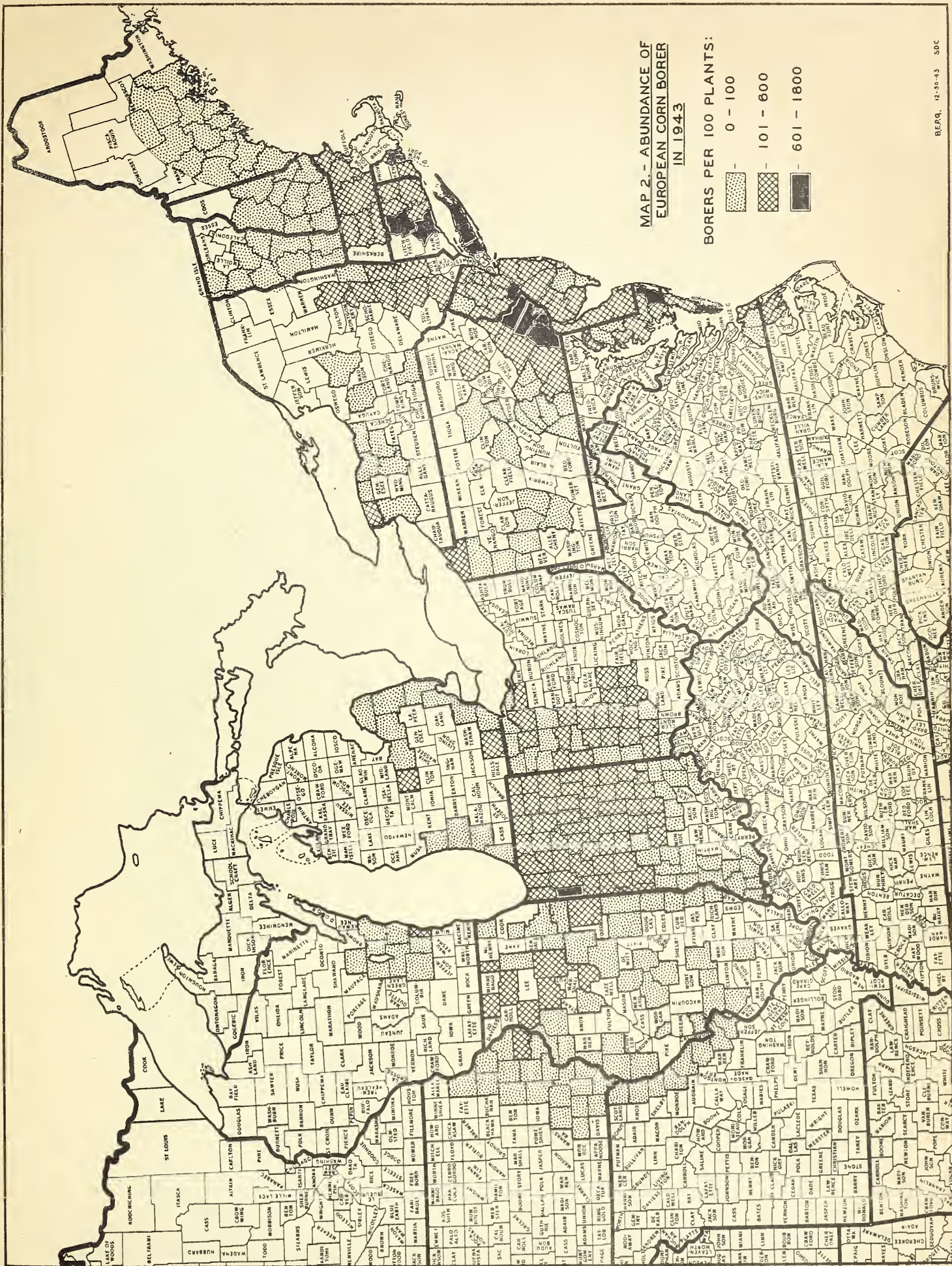
State and county	Locality	1942		1943	
		Average borers	Average borers	Average borers	Average borers
		Fields: Number	per plant Number	Fields: Number	per plant Number
<u>Connecticut:</u>					
New Haven	New Haven	25	7.9	15	9.5
<u>Illinois:</u>					
Kankakee	St. Anne	8	12.3	4	38.3
Madison	St. Louis	-	-	10	0.1
<u>Maine:</u>					
York	-	-	-	25	0.5
<u>Michigan:</u>					
Monroe	Erie	5	6.7	1	14.6
<u>New Jersey:</u>					
Burlington	Beverly	25	4.0	20	9.9
<u>New York:</u>					
Albany	Albany	-	-	4	10.8
Columbia	-	-	-	8	7.2
Monroe	Rochester	3	3.5	2	1.8
Nassau	-	-	-	11	0.8
Onondaga	Syracuse	10	5.7	10	6.5
Ontario	-	-	-	5	2.8
Rensselaer	Rensselaer	-	-	1	2.1
Ulster	-	-	-	5	4.4
<u>Ohio:</u>					
Lucas	Toledo	20	8.5	6	36.3



MAP I.—KNOWN DISTRIBUTION
OF EUROPEAN CORN BORER
IN 1943

 -KNOWN INFESTED AREA
IN 1942
 -ADDITIONAL COUNTIES
FOUND INFESTED IN
1943





MAP 2. - ABUNDANCE OF
EUROPEAN CORN BORER
IN 1943

BORERS PER 100 PLANTS:



